

DELIVERY SYSTEM INNOVATION IS THE KEY TO BETTER HEALTHCARE

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Committee on Ways and Means, Rural and Underserved Communities Health Task Force

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Chairman Neal, Ranking Member Brady, and distinguished members of the Rural and Underserved Communities Healthcare Task Force,

Thank you for the opportunity to contribute some policy suggestions to the Rural and Underserved Communities Health Task Force concerning accessibility and affordability.

I am Robert F. Graboyes, a senior research fellow at the Mercatus Center at George Mason University and healthcare scholar in its Open Health program. My work focuses on how public policy can bring better health to more people at lower cost, year after year.

For far too long, America's national healthcare debate has focused on health insurance and how Americans pay for healthcare services. This focus on payments sets into motion a highly ideological zero-sum game. To break free of this partisan trench warfare, I recommend that this task force focus less on insurance and more on the delivery of care.

Payment models are important. However, without large increases in resources (e.g., number of providers, hospital beds, or new drugs) or new ways of combining those resources to provide care, a new insurance card does little to improve access to care. This is particularly true for those living in rural or underserved areas, where quality options can be scarce or, in certain locales, nonexistent. From a practical standpoint, it is also far easier to assemble bipartisan support for delivery system reforms.

An essential path to improving care lies in innovation. This can involve new technologies, such as telehealth, or administrative structures, such as direct primary care (DPC). Unfortunately, barriers to innovation are high in healthcare delivery and those barriers are likely to impose especially high costs on rural and underserved communities. The paragraphs that follow describe some topics where bipartisan initiatives have a real chance of improving the care and lives of those living in these areas.

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GET OUT OF THE WAY OF TELEMEDICINE

In the digital age, doctors and nonphysician providers can deliver high-quality care from a distance. This can be especially valuable in communities that have few, if any, physicians.¹ In 2015, my then-92-year-old mother was alone in her apartment one evening, feeling well other than being bothered by a sore that didn't seem to be healing. In the course of a FaceTime conversation via iPad, her grandson (a doctor) came to suspect that she was in the early stages of septic shock, of which the sore was a symptom. He asked questions and observed her appearance. She was rushed to the hospital where doctors had to work furiously to save her life. My thought ever since has been, "You shouldn't need a medical doctor in the family to receive care by telehealth." Federal and state policies, however, throw a great many roadblocks in the way of telemedicine.

Telemedicine is the provision of medical care or services at a distance involving the use of information technologies or electronic communications.² This can include video conferencing, remote monitoring, online prescriptions, asynchronous consultations, emails, or telephone conversations. Telemedicine allows patients located in rural and underserved areas to receive medical care promptly and conveniently, anywhere and at any hour, thereby reducing costs and improving access—especially during emergencies.

Telemedicine has significant benefits for mothers in rural areas, thanks to the opportunity it offers to connect patients to subspecialists such as providers in maternal fetal medicine.³ In rural Arkansas, in-person visits to maternal fetal medicine specialists were reduced by 50 percent thanks to greater telemedicine use.⁴ Strikingly, the University of Arkansas telemedicine program helped reduce deliveries of very-low-birth-weight infants from 13.1 percent to 7.0 percent in nine participating hospitals that weren't equipped with neonatal intensive care units, and this resulted in a drop in infant mortality.⁵

However, regulatory barriers limit telemedicine. Some states require that an assistant, called a "telepresenter," be physically present with the patient, whether in the room or in the facility where the electronic visit takes place. This requirement undermines the advantages offered by telemedicine such as convenience, spontaneity, and cost reduction.⁶

Another obstacle to telemedicine is the common requirement that physicians engaged in a teleconsultation must be licensed in the state where the patient is located.⁷ As a Virginian, no one minds my visiting a doctor at Johns Hopkins as long as I drive into Maryland. But if I speak to the same doctor via video from my home, she would likely be required to have a Virginia license. This severely limits patients' access to telemedicine services, as the vast majority (84.5 percent) of physicians are only licensed in one state.⁸ Some scholars have challenged the constitutionality of legal barriers to

¹ Robert F. Graboyes and Jennifer Huddleston, "The Promise of Telemedicine in Mississippi," *Clarion Ledger*, August 4, 2018.

² Office of the National Coordinator for Health Information Technology, "Telemedicine and Telehealth," September 28, 2017, <https://www.healthit.gov/topic/health-it-initiatives/telemedicine-and-telehealth>.

³ Darcy Nikol Bryan, "Promoting Maternal Health in Rural and Underserved Areas" (Mercatus Policy Brief, Mercatus Center at George Mason University, Arlington, VA, October 2019).

⁴ Everett F. Magann et al., "Evolving Trends in Maternal Fetal Medicine Referrals in a Rural State Using Telemedicine," *Archives of Gynecology and Obstetrics*, 286, no. 6 (2012): 1383-92.

⁵ Elizabeth W. Kim et al., "Telemedicine Collaboration Improves Perinatal Regionalization and Lowers Statewide Infant Mortality," *Journal of Perinatology* 33, no. 9 (2013): 725-30.

⁶ Darcy Nikol Bryan, Jared M. Rhoads, and Robert F. Graboyes, "Healthcare Openness and Access Project: Mapping the Frontier for the Next Generation of American Health Care" (Project Overview, Mercatus Center at George Mason University, Arlington, VA, 2018), 37-40.

⁷ Office of the National Coordinator for Health Information Technology, "Are There State Licensing Issues Related to Telehealth?," April 15, 2019, <https://www.healthit.gov/faq/are-there-state-licensing-issues-related-telehealth>.

⁸ Andis Robeznieks, "Interstate Medical Licensure by the Numbers," *American Medical Association*, October 11, 2019.

telemedicine, as they may run afoul of the Interstate Commerce Clause.⁹ Interstate compacts over medical licensing are one way to propagate telehealth. Redefining the location of a telemedicine encounter as where the doctor sits, rather than where the patient sits, is another approach.

I often ask audiences to imagine the plight of a Spanish-speaking migrant worker whose child takes ill on a remote ranch in the middle of the night. With telemedicine, that family needs only a cellphone to reach a Spanish-speaking doctor within minutes. People in remote regions, migrant workers, members of linguistic minorities, Native Americans on reservations, those with mobility problems, those poorly served by public transportation, and those busy with work and childrearing ought to have the same access to telemedicine that my mother had through her grandson.

Long ago, I did work in sub-Saharan Africa, and in recent years I've been thrilled to watch the spread of lifesaving telemedicine to the remotest villages of that region.¹⁰

In America as well, eliminating barriers to telemedicine can greatly increase rural and underserved communities' access to quality healthcare.

ALLOW NONPHYSICIAN PROVIDERS TO PRACTICE UP TO THEIR QUALIFICATION LEVEL WITHOUT PHYSICIAN SUPERVISION

Many medical services require a physician's attention. However, countless tasks can be performed just as well by nonphysician professionals, such as nurse practitioners (NPs), physician assistants (PAs), nurse anesthetists, psychologists, and pharmacists, especially when it comes to delivering primary care services. Allowing them to practice to the full extent of their qualifications would increase access to care and help alleviate the consequences of the current (and looming) physician shortage.

For instance, in 28 states, NPs are required to collaborate or be directly supervised by a physician. This significantly limits the ability of NPs to care for patients. Furthermore, supervisory requirements can lead to dramatic consequences, like in the case of a Wyoming-based PA who was unable to care for patients after the physician who supervised him suddenly passed away.¹¹ A nurse anesthetist and professor recently told me that there are no anesthesiologists in her hometown, so she must be supervised by a physician who knows little about anesthesiology.

Easing restrictions on nonphysician practitioners who are able to perform tasks currently performed by doctors can free up doctors' time, thereby lowering costs and expanding access. Of course, nonphysician providers should not engage in care beyond the extent of their training.

ABOLISH OR LESSEN CERTIFICATE-OF-NEED REQUIREMENTS

In 35 states, healthcare providers who wish to offer certain new services must first apply for a certificate of need (CON). An application is only approved if the proposed service is deemed to meet a need in the population that would benefit from it. By limiting supply and competition, CON requirements especially restrict access to care in rural communities, reduce the quality of care, and

⁹ Amar Gupta and Deth Sao, "The Constitutionality of Current Legal Barriers to Telemedicine in The United States: Analysis and Future Directions of Its Relationship to National and International Health Care Reform," *Health Matrix: The Journal of Law-Medicine* 21, no. 2 (2012): 385-442.

¹⁰ Dan S. Wamala and Kaddu Augustin, "A Meta-Analysis of Telemedicine Success in Africa," *Journal of Pathology Informatics* 4, no. 6 (2013): 1-5.

¹¹ American Academy of Physician Assistants, "WY PA Unable to Care for Patients after Physician Death," December 12, 2017.

increase costs.¹² Some states would see a reduction of several hundreds of dollars per capita in healthcare spending if they were to repeal CON laws.¹³

Research has shown that states with CON laws have fewer community hospitals per capita and fewer ambulatory surgical centers per capita, with the greatest impact taking place in rural areas of the states.¹⁴ CON laws are even associated with higher mortality rates from heart failure, pneumonia, and heart attacks.¹⁵

CON and many aspects of these reforms are largely implemented at the state level. This makes it a challenge for federal policymakers to take action, but it's important to address and acknowledge these issues. Otherwise, any new federal policy proposals will be more likely to fail. Eliminating CON requirements can drastically improve access to high-quality care in rural areas.

REMOVE OBSTACLES TO CHARITY CARE

State medical licensing has thrown obstacles in the way of physicians who wish to provide charity care. The late Stan Brock founded Remote Area Medical (RAM), which provides free medical, dental, optical, and veterinary care in pop-up clinics in remote sites, such as Wise County, Virginia. A few years back, Brock described to me the difficulties of bringing medical providers from one state to another for the purpose of providing free care.¹⁶ This, he noted, was true even when he attempted to fly caregivers into Louisiana immediately following Hurricane Katrina.

In Mississippi, Carroll Landrum, a semiretired physician closed his brick-and-mortar office and began providing free or nearly-free care to residents of remote and underserved areas from his car—house calls, in other words. Apparently, for making house calls without having a brick-and-mortar clinic, Landrum was threatened with the loss of his medical license.¹⁷ While I have no way of verifying an anecdote a Mississippi doctor recently shared with me, it echoes stories I've heard from the doctors I've taught over the years: a patient, this doctor said, had come in from a distant rural county with a painful, grotesque, potentially life-threatening hernia that had apparently festered for years. The doctor asked what finally made him seek help. The patient said it was the first time he had ever been able to find a ride to the hospital. This is the sort of patient for whom Dr. Landrum (or telehealth) is meant.

To the extent possible, laws and regulations ought to encourage, not discourage, such acts of Good Samaritans among healthcare providers.

ENCOURAGE INNOVATIVE BUSINESS MODELS

A number of new business models have sprung up in healthcare. For example, DPC practices generally provide care for a fixed monthly fee, with no out-of-pocket costs for visits to doctors and other services. Often, these practices employ nonphysician employees to help care for patients, even to the extent of driving patients to pharmacies to help them purchase drugs. This has led some states to consider treating DPC practices as insurers (which they are not), thereby subjecting them to prohibitive expenses. In a 2016 telephone conversation, prominent DPC entrepreneur Rushika Fernandopulle told

¹² Matthew D. Mitchell, "Certificate-of-Need Laws: Are They Achieving Their Goals?" (Mercatus Policy Brief, Mercatus Center at George Mason University, Arlington, VA, August 2017).

¹³ Thomas Stratmann et al., "Certificate-Of-Need Laws: How CON Laws Affect Spending, Access, and Quality across the States," August 29, 2017, <https://www.mercatus.org/publications/corporate-welfare/certificate-need-laws-how-con-laws-affect-spending-access-and-quality>.

¹⁴ Bryan, "Promoting Maternal Health."

¹⁵ Thomas Stratmann et al., "Certificate-Of-Need Laws."

¹⁶ Robert F. Graboyes, "Care on the Margins — Stan Brock and RAM," *Inside Sources*, March 8, 2017.

¹⁷ Robert F. Graboyes, "Defending Volunteers — Ron Hines and Carroll Landrum," *Inside Sources*, March 15, 2017.

me he had offered to provide primary care to undocumented immigrants in several states for \$365 per year per person—saving the states millions of dollars by, among other things, reducing emergency room visits. He said state officials responded that while they would be interested in pursuing those savings, they would then begin treating his practice as an insurer, drastically raising his regulatory compliance costs.¹⁸ For this reason, he could not provide the services.

DPC can offer special benefits in rural and underserved areas.¹⁹ These clinics are typically open for long hours that are more convenient for those who have trouble reaching a doctor's office during working hours. In addition, they often provide services via telehealth, email, and other modes. Clarification of insurance and tax laws in this case would benefit DPC practices and their patients and potential patients.

WELCOME INTERNATIONAL MEDICAL GRADUATES

In many areas of healthcare, the United States faces critical shortages of providers. The problem will worsen in coming decades. A surprising number of counties across the United States don't have a single physician within their boundaries. One way of easing these gaps in coverage is to welcome more international medical graduates and lower the barriers they face in obtaining licenses to practice in the United States.

ACCOMMODATE TRAILING MILITARY SPOUSES

Military personnel frequently move across state lines. As they do, their spouses often find themselves out of work because their occupational licenses don't transfer across state lines. No doubt, a significant number of these spouses work in the healthcare professions. Making their licenses transferrable could help alleviate personnel shortages.

ENABLE UNMANNED AERIAL SYSTEMS

Unmanned aerial vehicles (UAVs, or "drones") can save lives in situations where time is critical.²⁰ In time, they may also increase efficiency and reduce costs. In the African countries of Rwanda and Ghana, UAVs already save lives by transporting blood products and other medical supplies across those countries. The United States and other developed countries are exploring potential uses for medical UAVs and conducting experiments accordingly. Well-documented flights in Rwanda transporting blood to mothers hemorrhaging during childbirth comprise an outstanding example of this lifesaving service.

However, integrating medical drones into America's busy airspace will require significant action by federal, state, and local authorities. American airspace architecture was developed more than half a century ago, and shoehorning a new class of vehicles into that architecture poses many challenges.²¹ Ground-to-drone communications must be fast, reliable, and data intensive, so the FCC will need to be involved in broadband allocation and satellite access.²² Technology companies and the FCC are currently grappling with the regulatory framework necessary to implement 5G (fifth-generation wireless standards), which will allow faster, more powerful, more reliable wireless communication.²³

Making American skies drone friendly will also require the involvement of the Department of Homeland Security, since UAVs can pose a variety of security threats. Various health-related agencies,

¹⁸ Robert F. Graboyes, "Direct Primary Care — Rushika Fernandopulle and Iora," *Inside Sources*, November 30, 2016.

¹⁹ Eli Saslow, "The Most Remote Emergency Room: Life and Death in Rural America," *Washington Post*, November 16, 2019.

²⁰ Robert F. Graboyes and Darcy N. Bryan, "Drones Delivering Medical Supplies and More Can Help Save American Lives," *First Opinion (STAT)*, January 18, 2019.

²¹ Amit Ganjoo, "A Deep Dive into UTM and the Flight Information Management System for Drones," *DroneLife*, August 22, 2019.

²² James Poss, "The 'Why's' of the 2018 FAA Reauthorization Act," *Inside Unmanned Systems*, January 7, 2019.

²³ Hanif Ullah et al., "5G Communication: An Overview of Vehicle-to-Everything, Drones, and Healthcare Use-cases," *IEEE Access*, March 18, 2019 (2019): 37251-68.

such as the Department of Health and Human Services and the National Institutes of Health, can encourage this technology by, for example, supporting local experiments.

I entirely agree with professor John Cochrane of the Hoover Institution at Stanford University who stated, “What’s the biggest thing we could do to ‘bend the cost curve,’ as well as finally tackle the ridiculous inefficiency and consequent low quality of health-care delivery? Look for every limit on supply of health care services, especially entry by new companies, and get rid of it.”²⁴ This logic applies especially well to the question of how America can best improve healthcare in rural and underserved communities, which face unique challenges in delivering primary care, chronic care, specialty care, and emergency care. All the issues raised in these comments involve removing obstacles to supply.

Federal and state governments can do a great deal to augment and improve the provision of care to rural and underserved populations. Part of the federal government’s task is to clear the way for innovators—to get out of the way of those who have better ways to serve patients in these areas. Perhaps more proactively, the federal government will have to be a partner in improving infrastructure, such as redesigning airspace architecture to make way for medical drones.

Please don’t hesitate to reach out to our team if you have any questions. I am more than happy to discuss these ideas in detail.

Sincerely,

Robert F. Graboyes

²⁴ John H. Cochrane, “After the ACA: Freeing the Market for Health Care,” in *The Future of Healthcare Reform in the United States*, ed. Anup Malani and Michael H. Schill (Chicago: University of Chicago Press, 2014).